

Title (en)

METHOD FOR DEFINING A LASER CONTROL SIGNAL FOR DIFFERENT LASER TYPES, AND LASER PLOTTER AND GALVO MARKING LASER THEREFOR

Title (de)

VERFAHREN ZUM FESTLEGEN EINES LASER-ANSTEUERSIGNALS FÜR UNTERSCHIEDLICHE LASERTYPEN UND LASERPLOTTER SOWIE GALVO-MARKIERLASER HIERFÜR

Title (fr)

PROCÉDÉ POUR DÉFINIR UN SIGNAL DE COMMANDE LASER POUR DIFFÉRENTS TYPES DE LASER ET TRACEUR LASER ET LASER DE MARQUAGE GALVO CORRESPONDANT

Publication

**EP 4294595 A2 20231227 (DE)**

Application

**EP 22725348 A 20220317**

Priority

- AT 502022021 A 20210324
- AT 2022060078 W 20220317

Abstract (en)

[origin: WO2022198249A2] The invention describes a laser plotter, a galvo marking laser and a method for defining a laser control signal (19a) for a laser source (4) for different laser machine types (1), in particular laser plotters (2) or galvo marking lasers, for cutting, engraving, marking and/or inscribing a workpiece (7), in which, in a housing (3) of the laser machine type (1), at least one laser source (4) is used for processing a workpiece (7), wherein a control unit (13) generates a PWM signal (19, 19a) for controlling the laser source (4) from the set parameters and/or a loaded job, wherein preferably the workpiece (7) is placed on a processing table (9) and the workpiece (7) is processed line by line, wherein a dedicated PWM signal (19, 19a) for controlling the laser source (4) is generated for each line. Upon a defined edge (28), in particular the falling edge (28a), of the PWM signal (19, 19a), a correction process (21) for generating a preferably changed PWM signal (19a), in particular a laser control signal (19a), is carried out, wherein the correction process (21) determines the preceding pause duration (23, 23a,b,c,...) and the pulse duration (24, 24a,b,c,...), from which a correction value (25, 25a,b,c,...) or correction factor (25, 25a,b,c,...) is determined or calculated.

IPC 8 full level

**B23K 26/0622** (2014.01); **B23K 26/08** (2014.01); **B23K 26/082** (2014.01); **B23K 26/352** (2014.01); **B23K 26/36** (2014.01); **B23K 26/70** (2014.01)

CPC (source: AT EP US)

**B23K 26/0622** (2015.10 - AT EP); **B23K 26/0626** (2013.01 - US); **B23K 26/082** (2015.10 - EP); **B23K 26/0876** (2013.01 - EP);  
**B23K 26/352** (2015.10 - EP); **B23K 26/359** (2015.10 - US); **B23K 26/36** (2013.01 - EP); **B23K 26/38** (2013.01 - US); **B23K 26/70** (2015.10 - EP);  
**H01S 3/1312** (2013.01 - AT); **B23K 26/082** (2015.10 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022198249 A2 20220929; WO 2022198249 A3 20221124**; AT 524985 A1 20221115; AT 524985 B1 20231015; EP 4294595 A2 20231227;  
TW 202302258 A 20230116; US 2024181561 A1 20240606

DOCDB simple family (application)

**AT 2022060078 W 20220317**; AT 502022021 A 20210324; EP 22725348 A 20220317; TW 111111152 A 20220324;  
US 202218551948 A 20220317